

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 19 APR 2005

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Applicant's or agent's file reference <b>BW312R/RVP</b>	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. <b>PCT/IB2004/050318</b>	International filing date (day/month/year) <b>23.03.2004</b>	Priority date (day/month/year) <b>07.04.2003</b>	
International Patent Classification (IPC) or national classification and IPC <b>A23G3/00</b>			
Applicant <b>ROVERIO, Gianluigi</b>			
1. This report is the International preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of 4 sheets, including this cover sheet. 3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 3 sheets, as follows: <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).			
4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the opinion <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application			
Date of submission of the demand  <b>02.02.2005</b>		Date of completion of this report  <b>18.04.2005</b>	
Name and mailing address of the International preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer  <b>Marzano Monterosso,</b>  Telephone No. +49 89 2399-2902	



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/IB2004/050318

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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

**Description, Pages**

1-4, 7-11	as originally filed
5, 6	received on 02.02.2005 with letter of 31.01.2005

**Claims, Numbers**

8 (part), 9-18	as originally filed
1-7, 8 (part)	received on 02.02.2005 with letter of 31.01.2005

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "*superseded*."

**INTERNATIONAL PRELIMINARY REPORT  
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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1-18
	No: Claims	
Inventive step (IS)	Yes: Claims	1-18
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-18
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

1 Reference is made to the following documents:

D2: (WIENECKE HORST) 17 August 1982 (1982-08-17)

2 Document US-A-4344972 (D2), which is considered to represent the most relevant state of the art, discloses a process for the preparation of an edible sugary solution from which the subject-matter of claim 1 differs in that fresh floral material of decorative flowers is used, said material being cultivated with a cultivation technique suitable for the production of edible material, in that the addition of the floral material occurs before the pasteurizing step and in the range of temperatures and processing times of step c.

2.1 The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

2.2 The problem to be solved by the present invention may be regarded as providing herb-containing sugary confections containing floral material having unusual flavours.

2.3 The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

The documents of the available prior art fail to show the use of decorative flowers (in D2 camomile flowers are mentioned) and to explicitly state that said flowers are produced with techniques suitable for the production of edible material.

Furthermore the relatively short period of pasteurisation as well as its temperature provide for an efficient transfer of flavours from the floral material to the sugary composition.

3 The same arguments apply for independent claims 12 and 15, which are as well considered to comply with the requirements of Art. 33 (1) and (3) PCT.

4 Claims 2-11, 14 and 16-18 are dependent on claims 1, 13 and 15 respectively and as such also meet the requirements of the PCT with respect to novelty and inventive step.

5 With regards to claim 13 it is considered that the subject matter of this claim is equivalent to claim 10.

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- wisteria)
- Tiliaceae (e.g., lime tree)
  - Primulaceae (e.g., primrose)
  - Compositae (e.g., daisy, calendula, ~~dandelion~~,
  - 5 marigold, sunflower-genus helianthus-100
  - species, chrysanthemum, ~~chamomile~~, solidago
  - (goldenrod), zinnia, yarrow, cornflower)
  - ~~-Boraginaceae (e.g., borage, heliotropium~~
  - ~~(preferably vanilla)~~
  - 10 -Rosaceae (e.g., rose, hawthorn, peach tree, almond
  - tree, almond leaved pear, ~~cherry tree~~)
  - Scrophulariaceae (e.g., snapdragons)
  - Liliaceae (e.g., liliun, hyacinth, tulip)
  - ~~-Malvaceae (e.g., mallow)~~
  - 15 -Hypericaceae (Guttiferae) (e.g., hypericum)
  - Oleaceae (e.g., lilac, ~~osmanthus~~, forsythia,
  - jasmin)
  - Cannabaceae (e.g., hop)
  - Labiatae (e.g., ~~sweet marjoram~~, lavender, ~~sage~~,
  - 20 ~~lemon balm, mint~~)
  - Violaceae (e.g., pansy, sweet violet, violet)
  - Gesneriaceae (e.g., African violet)
  - ~~-Rutaceae (e.g., sweet orange)~~
  - ~~-Rubiaceae (e.g., asperula)~~
  - 25 ~~-Lamiaceae (e.g., ballota, basil, rosemary)~~
  - Iriaceae (e.g., iris (*iris pallida lam.*), Blue
  - iris, iris, sword lily, freesia)
  - Amaranthaceae (e.g., pigweed)
  - Passifloraceae (e.g., passionflower)
  - 30 -Caryophyllaceae (e.g., carnation)
  - Geraniaceae (e.g., geranium)
  - Hypericaceae (e.g., hypericum)
  - ~~-Ericaceae (e.g., heather)~~
  - Asteraceae (compositae) (e.g., pot marigold, curry
  - 35 plant, genepy, daisies)
  - Campanulaceae (e.g., bellflower)
  - Amaryllidaceae (e.g., narcissus, alstroemeria)

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-Brassicaceae (cruciferae) (e.g., bittercress, gillyflower, ~~cardamine~~)

-Caprifogliaceae (e.g., ~~elder~~, viburnum)

-Tropaeolaceae (e.g., nasturtium)

5 -Ranunculaceae (e.g., peony, ranunculus)

-Lythraceae (e.g., purple loosestrife)

~~-Valerianaceae (e.g., valerian)~~

-Papaveraceae (e.g., poppy)

-Resedaceae (e.g., weld)

10 -Nyctaginaceae (e.g., Four-O'Clock)

-Convolvulaceae (e.g., convolvulus)

~~-Apiaceae (Umbelliferae) (e.g., dill)~~

Hence, the floral material harvested in step a. of the process of the invention can be cultivated with organic farming techniques. In another embodiment of the invention the cultivation technique is not the organic one, but is anyhow a technique similar to that used in the horticultural production.

In fact, for those species where biological control does not suffice to obtain a suitable floral material, an integrated control is carried out using plant protection products in observance of their latency periods and exclusively insofar as necessary. For instance, in the Rosaceae there may be an onset of fungal diseases (e.g., verticillium) for which a control with biological products is not sufficient. In these cases, the use of suitable plant protection products (chemical fungicides) is advisable, always observing their latency periods; in fact, in these cases the products can anyhow be intended for human nutrition.

Therefore, according to the invention, the floral material harvested in step a. of the process for the preparation of the sugary solution, is cultivated with techniques useful in the horticultural field for the manufacture of products that can be intended for human nutrition.

Moreover, in order to obtain a floral material of

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CLAIMS

1. A process for the preparation of an edible sugary solution containing floral material consisting in the following steps: of decorative flowers

5 a. harvesting fresh floral material cultivated with cultivation techniques suitable for the production of material that can be intended for human nutrition;

b. fragmenting said floral material and introducing it in an edible sugary solution;

10 c. pasteurising said solution by heating said solution for a period of time ranging from 10 to 20 min at a temperature ranging from about 70°C to about 90°C and rapidly cooling said solution at a temperature ranging from about 10°C to about 0°C.

15 2. The process according to claim 1, wherein the floral material harvested in step a. is cultivated with organic farming techniques.

20 3. The process according to claim 1, wherein the floral material harvested in step a. is cultivated with techniques useful in the horticultural field.

4. The process according to any one of the claims 1 to 3, wherein said floral material is harvested when the first petals are completely extended and the full unfolding of the blossom begins.

25 5. The process according to any one of the claims 1 to 3, wherein said floral material is harvested at full unfolding of the flowers and the petals first unfolded are discarded prior to proceeding with step b..

30 6. The process according to any one of the claims 1 to 5, wherein said floral material is harvested in late spring or early autumn.

7. The process according to any one of the claims 1 to 6, wherein said floral material comprises tips or petals or whole flowers or flower parts.

35 8. The process according to any one of the claims 1 to 7, wherein in said sugary solution there are added, in step b., one or more aromas, natural and/or non-